UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

DALLAS AREA RAPID TRANSIT EMPLOYEES' DEFINED BENEFIT RETIREMENT PLAN AND TRUST and SHEET METAL WORKERS' LOCAL 19 PENSION FUND, on behalf of themselves and all others similarly situated, Plaintiffs, v. BANK OF AMERICA, N.A., BARCLAYS CAPITAL INC., BNP PARIBAS SECURITIES CORP., CITIGROUP GLOBAL MARKETS INC., DEUTSCHE BANK SECURITIES INC., HSBC SECURITIES (USA) INC., HSBC BANK PLC, J.P. MORGAN CHASE BANK, N.A., J.P. MORGAN SECURITIES LLC, MERRILL LYNCH, PIERCE, FENNER & SMITH INC; NOMURA SECURITIES INTERNATIONAL, INC., TD SECURITIES (USA) LLC, WELLS FARGO SECURITIES, LLC, Defendants.	Case No.: 1:19-cv-02715 **CLASS ACTION COMPLAINT** **JURY TRIAL DEMANDED**

Dallas Area Rapid Transit Employees Defined Benefit Retirement Plan and Trust ("DART") and Plaintiffs Sheet Metal Workers' Local 19 Pension Fund ("SMW Local 19"), individually and on behalf of a class of all others similarly situated, bring this class action for treble damages and injunctive relief under the antitrust laws of the United States, and allege as follows:

NATURE OF THE ACTION

1. Our system of antitrust laws rests "on the premise that the unrestrained interaction of competitive forces will yield the best allocation of our economic resources, the lowest prices,

the highest quality and the greatest material progress, while at the same time providing an environment conductive to the preservation of our democratic political and social institutions."[1] The bedrock of those laws, the Sherman Act, serves as "a comprehensive charter of economic liberty aimed at preserving free and unfettered competition as the rule of trade."[2]

2. Defendants violated that charter by conspiring to fix prices and restrain competition in the market for unsecured bonds issued by Government-Sponsored Enterprises ("GSEs") from at least as early as January 1, 2012 through June 1, 2018.

3. GSEs are federally-created but privately-held enterprises that were designed by Congress to advance public policy objectives in key areas of the economy, such as housing and agriculture. This case concerns bonds issued by four GSEs: the Federal National Mortgage Association ("Fannie Mae"), the Federal Home Loan Mortgage Corporation ("Freddie Mac"), the Federal Farm Credit Banks Funding Corporation ("FFCB"), and the Federal Home Loan Banks ("FHLB").

4. GSEs issue debt in order to fund their activities. Unsecured bonds issued by Fannie Mae, Freddie Mac, FFCB, and FHLB are referred to here as "GSE bonds." Although GSE bonds are not formally backed by the full faith and credit of the United States, due to their association with the federal government, GSE bonds benefit from an implicit federal guarantee.

5. GSE bonds are sold on both the primary and secondary markets. GSEs issue most bonds on the primary market through a syndication process. In a syndication, when a GSE wants to issue bonds, it retains one or more banks to underwrite its bond issue and sell those bonds to investors. Defendants are among the largest underwriters of GSE bonds sold on the primary

[1] *See N. Pac. Ry. Co. v. United States*, 356 U.S. 1, 4 (1958).

[2] *Id.*

market. According to one measure, they comprise the top seven largest underwriters of U.S. agency bonds (a larger category which includes GSE bonds).

6. Investors can also buy or sell at resale previously issued GSE bonds from dealers on the secondary market. In addition to dominating underwriting in the primary market for GSE bonds, Defendants are among the largest such dealers in the secondary market. The first step in buying or selling bonds on the secondary market is to ask a dealer for a quote. Depending on whether a customer is seeking to buy or sell, the dealer gives the customer a "bid" (the price at which the dealer would pay for the bond), or an "offer" (the price at which the dealer would sell the bond). The dealer attempts to buy bonds at a low price and sell them at a higher price. The difference between the bid and offer—known as the "bid-offer spread"—is the way the dealer earns a profit.

7. As competitors in the secondary market for GSE bonds, absent collusion, Defendants have an incentive to compete vigorously for the business of their investor clients. But because Defendants were not satisfied with the bid-offer spreads that would result from genuine competition in the market for GSE bonds, they colluded to rig the market.

8. Prior to the 2008 financial crisis, the volume of GSE bond issuances had risen steadily, and dealers made healthy profits both underwriting issuances and trading bonds on the secondary market. After the financial crisis, however, and particularly after the government's mandate to reduce Fannie Mae's and Freddie Mac's balance sheets, the volume of new issuances declined. This eroded profits for the desks underwriting and trading GSE bonds.

9. In a competitive market, Defendants would have responded to the shrinking size of the GSE market by competing ferociously for market share through tightening spreads. Such competition benefits customers but reduces the dealers' per-trade profits. Instead, Defendants

conspired to tilt the market in their collective favor—and against the interests of their customers—by manipulating the prices and spreads of GSE bonds.

10. Defendants frequently communicated with one another, providing opportunities to secretly, illicitly, and continuously manipulate the pricing of GSE bonds over the course of many years. Traders employed by Defendants were in constant contact with one another through electronic chat rooms on Bloomberg and other hosts, as well as through emails, text messages, and telephone calls. Frequent communications provide cartel members with an opportunity to implement and fine-tune their conspiracy in real time on an ongoing basis, in order to ensure it will have a maximum effect. Such communications provide a platform by which traders can effectively conspire throughout the trading day by sharing—in real time—highly sensitive trading information about their own books and about the private trading strategies of their customers. Recent government investigations into multiple markets—several of which have resulted in fines and guilty pleas—revealed that several of the Defendants used these same methods to manipulate the pricing of multiple financial instruments.

11. The structure and characteristics of the GSE market offered extraordinary opportunities for collusion. In contrast to other financial markets, upon information and belief, the desks trading GSE bonds for the Defendant banks observed no divisions or ethical walls between "syndicate" functions relating to primary bond issuances and secondary trading. As a result, the traders who structured and marketed new bond issuances during the Class Period and who, as part of that function, regularly communicated non-public pricing and client information with the other banks that make up the rest of the underwriting syndicate—were the same people who traded those bonds post-issuance in the secondary market. Because new bonds were issued regularly throughout the Class Period, Defendants' GSE bond traders had the opportunity to

exchange competitively sensitive information, on a regular and ongoing basis, with traders at other Defendant banks.

12. Without any ethical walls between syndicate and secondary trading activities, Defendants' GSE bond traders could exchange—on a large scale—inside information pertaining to primary issuances by the GSEs, which they could use to their advantage. Sharing information on their respective pipelines, the conspirators could position themselves to earn supra-competitive trading profits in the secondary market because they knew more about supply and demand in the market and could position their trades accordingly. For example, when a trader at one Defendant learned of non-public details of a new GSE debt offering, such as deal size, maturity, and buy-side interest, that Defendant (and other Defendants with whom that information was shared) could position themselves in such a way as to "earn" profits far exceeding those available in a competitive market.

13. Defendants' goal was to ensure that the cartel members would transact with their investor clients at prices more favorable for the conspiring dealers—and thus worse for the customer—than could have been achieved absent collusion. In addition to refraining from competing with each other, Defendants actively helped each other to subvert competition so they could execute GSE bond trades on financial terms more favorable to them than in a competitive market. As discussed below, it is well established in the economics literature that a reduction in competition among dealers harms investors who purchase the financial product for which competition was reduced. Less competition means higher prices.

14. Defendants' conspiracy severely harmed Plaintiffs and the Class and restrained competition in the market for GSE bonds. Plaintiffs and the Class entered into billions of dollars' worth of GSE bond transactions with the Defendants during the Class Period. As a

result of their conspiracy, Defendants padded their own profits, and their personnel received huge annual bonuses, by cheating Plaintiffs and the Class out of potentially billions of dollars. Defendants also directly injured each Class member—including pension funds, university endowment funds, hedge funds, insurance companies, corporate treasuries, fiduciary and depository institutions, small banks, money managers, and individual investors —resulting in potentially billions of dollars in damages.

15. Defendants' customers were unaware that Defendants had secretly agreed not to compete. Those customers often engaged in extensive efforts to drive competition among Defendants to secure better price terms for their GSE bonds. Little did they know that, behind the scenes, Defendants could share their clients' confidential information and coordinate their actions to ensure such efforts to benefit from competition went nowhere.

16. Defendants' GSE bonds conspiracy is currently under investigation by the U.S. Department of Justice ("DOJ"). In June 2018, Bloomberg reported that the DOJ had launched a criminal investigation regarding "whether traders manipulated prices in the $550 billion market for unsecured bonds issued by Fannie Mae and Freddie Mac."[3] According to the Bloomberg report, DOJ officials are "looking at potential fraud and antitrust violations," and are examining whether "traders at banks coordinated with one another in order to benefit the institutions they work for."[4]

17. Defendants' conspiracy offends the very core of the antitrust laws. Defendants should have been aggressively competing with each other for the business of their customers, not

---

[3] David McLaughlin & Tom Schoenberg, *U.S. Opens Criminal Probe Into Trading in Fannie, Freddie Bonds*, BLOOMBERG (June 1, 2018), https://www.bloomberg.com/news/articles/ 2018-06-01/trading-in-fannie-freddie-bonds-is-said-to-be-probed-by-u-s.

[4] *Id*.

secretly conspiring to achieve profits they could not have achieved on their own. Accordingly, Plaintiffs bring this class action to hold Defendants accountable for the injuries they caused.

JURISDICTION AND VENUE

18. This Court arises under Section 1 of the Sherman Antitrust Act, 15 U.S.C. § 1, Sections 4 and 16 of the Clayton Act, 15 U.S.C. §§ 15 and 26.

19. This Court has subject matter jurisdiction over this action under Sections 4 and 16 of the Clayton Act (15 U.S.C. §§ 15(a) and 26), and under 28 U.S.C. §§ 1331 and 1337.

20. Venue is proper in the Southern District of New York under 15 U.S.C. §§ 15(a) and 22, as well as pursuant to 28 U.S.C. § 1391(b), (c), and (d). During the Class Period, all Defendants resided, transacted business, were found, or had agents in the Southern District of New York; a substantial part of the events or omissions giving rise to the claims occurred in the Southern District of New York; and a substantial portion of the affected interstate trade and commerce discussed herein was carried out in the Southern District of New York.

21. This Court has personal jurisdiction over Defendants under 15 U.S.C. § 22, because Defendants were incorporated in or have their principal places of business in the United States. This Court also has personal jurisdiction over Defendants because: Defendants transacted business throughout the United States, including in this District; each Defendant had substantial contacts with the United States, including in this District; each Defendant committed overt acts in furtherance of Defendants' conspiracy in the United States; each Defendant is an agent of the other Defendants; and Defendants' conspiracy was directed at, and had the intended effect of, causing injury to persons residing in, located in, or doing business throughout the United States, including in this District.

22. Alternatively, to the extent any Defendant is not subject to jurisdiction in any state's courts of general jurisdiction, this Court has personal jurisdiction over that Defendant under Federal Rule of Civil Procedure 4(k)(2) because the Court's exercise of jurisdiction is consistent with the United States Constitution and laws.

INTERSTATE COMMERCE

23. Defendants' activities were within the flow of and substantially affected interstate commerce.

24. During the Class Period, Defendants sold significant quantities of GSE bonds in a continuous and uninterrupted flow of interstate commerce, including through and into this District.

25. Defendants' conduct caused direct, substantial, and reasonably foreseeable and intended anticompetitive effects upon interstate commerce within the United States.

PARTIES

A. Plaintiffs

26. Plaintiff Dallas Area Rapid Transit Employees' Defined Benefit Retirement Plan and Trust is a pension fund headquartered in Dallas, Texas. DART provides retirement benefits to employees of Dallas Area Rapid Transit, a regional transportation authority created, organized, and existing pursuant to Chapter 452, Texas Transportation Code, and as such, is a legislatively created political subdivision of the State of Texas. DART manages nearly $170 million in assets, and, upon information and belief, transacted in more than $59 million of GSE bonds with counterparties that included one or more Defendants. As a result, DART was injured by Defendants' unlawful and anticompetitive conduct.

27. Plaintiff Sheet Metal Workers' Local 19 Pension Fund is a pension fund headquartered in Philadelphia, Pennsylvania. SMW Local 19 was established in 1968 to provide

retirement benefits for sheet metal workers in and around the Philadelphia area. It manages over $275 million in assets. Upon information and belief, SMW Local 19 transacted in more than $10 million dollars of GSE bonds with counterparties that included one or more Defendants. As a result, SMW Local 19 was injured by Defendants' unlawful and anticompetitive conduct.

B. Defendants

28. Whenever reference is made to any Defendant entity, such reference includes that entity, its parent companies, subsidiaries, affiliates, predecessors, and successors. In addition, whenever reference is made to any act, deed, or transaction of any entity, the allegation means that the entity engaged in the act, deed, or transaction by or through its officers, directors, agents, employees, or representatives while they were actively engaged in the management, direction, control, or transaction of the entity's business or affairs.

29. **Bank of America.** Defendant Bank of America, N.A. is a federally chartered national banking association with its principal place of business in Charlotte, North Carolina. Bank of America, N.A. has one of its largest branches, with at least hundreds of employees, located at the "Bank of America Tower," in New York, New York. At all times during the Class Period, Bank of America, N.A. had traders in New York who facilitated and executed GSE bond transactions with the Class. Bank of America, N.A. directed its collusive GSE bond transactions to the United States, including New York in particular, and engaged in these activities in the United States, including in New York, including by serving as a trading broker. Bank of America, N.A. purposely transacted in GSE bonds in the United States with Class members at artificial prices.

30. Defendant Merrill Lynch, Pierce, Fenner & Smith Inc. is a corporation organized under the laws of Delaware with its principal place of business in New York, New York.[5] At all times during the Class Period, Merrill Lynch, Pierce, Fenner & Smith Inc. had traders in New York who facilitated and executed GSE bond transactions with the Class. Merrill Lynch, Pierce, Fenner & Smith Inc. directed its collusive GSE bond transactions to the United States, including New York in particular, and engaged in these activities in the United States, including in New York, including by serving as a trading broker. Merrill Lynch, Pierce, Fenner & Smith Inc. purposely transacted in GSE bonds in the United States during the Class Period with Class members at artificial prices.

31. Defendants Bank of America, N.A. and Merrill Lynch, Pierce, Fenner & Smith Inc. are referenced collectively in this Complaint as "Bank of America."

32. **Barclays.** Defendant Barclays Capital Inc. ("Barclays") is a corporation organized under the laws of Connecticut with its principal place of business in New York, New York. At all times during the Class Period, Barclays had traders in New York who facilitated and executed GSE bond transactions with the Class. Barclays directed its collusive GSE bond transactions to the United States, including New York in particular, and engaged in these activities in the United States, including in New York, including by serving as a trading broker. Barclays purposely transacted in GSE bonds in the United States during the Class Period with Class members at artificial prices.

33. **BNP Paribas.** Defendant BNP Paribas Securities Corp. ("BNP Paribas") is a corporation organized under the laws of Delaware with its principal place of business in New

[5] On November 1, 2010, Banc of America Securities LLC ("BAS") was merged into Merrill Lynch, Pierce, Fenner & Smith Inc. BAS no longer exists as an entity, and Merrill Lynch, Pierce, Fenner & Smith Inc. is the surviving entity.

York, New York. At all times during the Class Period, BNP Paribas had traders in New York who facilitated and executed GSE bond transactions with the Class. BNP Paribas directed its collusive GSE bond transactions to the United States, including New York in particular, and engaged in these activities in the United States, including in New York, including by serving as a trading broker. BNP Paribas purposely transacted in GSE bonds in the United States during the Class Period with Class members at artificial prices.

34. **Citi.** Defendant Citigroup Global Markets Inc. ("Citi") is a corporation organized under the laws of New York with its principal place of business in New York, New York. At all times during the Class Period, Citi had traders in New York who facilitated and executed GSE bond transactions with the Class. Citi directed its collusive GSE bond transactions to the United States, including New York in particular, and engaged in these activities in the United States, including in New York, including by serving as a trading broker. Citi purposely transacted in GSE bonds in the United States during the Class Period with Class members at artificial prices.

35. **Deutsche Bank.** Defendant Deutsche Bank Securities Inc. ("Deutsche Bank") is a corporation organized under the laws of Delaware with its principal place of business in New York, New York. At all times during the Class Period, Deutsche Bank had traders in New York who facilitated and executed GSE bond transactions with the Class. Deutsche Bank directed its collusive GSE bond transactions to the United States, including New York in particular, and engaged in these activities in the United States, including in New York, including by serving as a trading broker. Deutsche Bank purposely transacted in GSE bonds in the United States during the Class Period with Class members at artificial prices.

36. **HSBC.** Defendant HSBC Securities (USA) Inc. is a corporation organized under the laws of Delaware with its principal place of business in New York, New York. At all times

during the Class Period, HSBC Securities (USA) Inc. had traders in New York who facilitated and executed GSE bond transactions with the Class. HSBC Securities (USA) Inc. directed its collusive GSE bond transactions to the United States, including New York in particular, and engaged in these activities in the United States, including in New York, including by serving as a trading broker. HSBC Securities (USA) Inc. purposely transacted in GSE bonds in the United States during the Class Period with Class members at artificial prices.

37. Defendant HSBC Bank plc is a corporation organized under the laws of the United Kingdom with its principal place of business in London, United Kingdom. HSBC Bank plc had agents in New York who facilitated and executed GSE bond transactions with the Class. HSBC Bank plc directed its collusive GSE bond transactions to the United States, including New York in particular, and engaged in these activities in the United States, including in New York, including by serving as a trading broker. HSBC Bank plc purposely transacted in GSE bonds in the United States during the Class Period with Class members at artificial prices.

38. Defendants HSBC Securities (USA) Inc. and HSBC Bank plc are referenced collectively in this Complaint as “HSBC.”

39. **J.P. Morgan.** Defendant J.P. Morgan Securities LLC, which acquired J.P. Morgan Clearing Corp. in 2016 and was formerly known as J.P. Morgan Securities Inc., is a corporation organized under the laws of Delaware with its principal place of business in New York, New York. At all times during the Class Period, J.P. Morgan Securities LLC had traders in New York who facilitated and executed GSE bond transactions with the Class. J.P. Morgan Securities LLC directed its collusive GSE bond transactions to the United States, including New York in particular, and engaged in these activities in the United States, including in New York,

including by serving as a trading broker. J.P. Morgan Securities LLC purposely transacted in GSE bonds in the United States during the Class Period with Class members at artificial prices.

40. Defendant J.P. Morgan Chase Bank, N.A. is a federally chartered national banking association with its principal place of business in New York, New York. At all times during the Class Period, J.P. Morgan Chase Bank, N.A. had traders in New York who facilitated and executed GSE bond transactions with the Class. J.P. Morgan Chase Bank, N.A. directed its collusive GSE bond transactions to the United States, including New York in particular, and engaged in these activities in the United States, including in New York, including by serving as a trading broker. J.P. Morgan Chase Bank, N.A. purposely transacted in GSE bonds in the United States during the Class Period with Class members at artificial prices.

41. Defendants J.P. Morgan Securities LLC and J.P. Morgan Chase Bank, N.A. are referenced collectively in this Complaint as "J.P. Morgan."

42. **Nomura.** Defendant Nomura Securities International, Inc. ("Nomura") is a corporation organized under the laws of New York, with its principal place of business in New York, New York. At all times during the Class Period, Nomura had brokers in New York who facilitated and executed GSE bond transactions with the Class. Nomura directed its collusive GSE bond transactions to the United States, including New York in particular, and engaged in these activities in the United States, including in New York, including by serving as a trading broker. Nomura purposely transacted in GSE bonds in the United States during the Class Period with Class members at artificial prices.

43. **TD Securities.** Defendant TD Securities (USA) LLC ("TD Securities") is a corporation organized under the laws of Delaware with its principal place of business in New York, New York. At all times during the Class Period, TD Securities had brokers in New York

who facilitated and executed GSE bond transactions with the Class. TD Securities directed its collusive GSE bond transactions to the United States, including New York in particular, and engaged in these activities in the United States, including in New York, including by serving as a trading broker. TD Securities purposely transacted in GSE bonds in the United States during the Class Period with Class members at artificial prices.

44. **Wells Fargo.** Defendant Wells Fargo Securities, LLC ("Wells Fargo") is a corporation organized under the laws of Delaware with its principal place of business in Charlotte, North Carolina. At all times during the Class Period, Wells Fargo had brokers in New York who facilitated and executed GSE bond transactions with the Class. Wells Fargo directed its collusive GSE bond transactions to the United States, including New York in particular, and engaged in these activities in the United States, including in New York, including by serving as a trading broker. Wells Fargo purposely transacted in GSE bonds in the United States during the Class Period with Class members at artificial prices.

45. **Other conspirators.** Various other entities, persons, firms, and corporations that are unknown and not named as Defendants, have participated as co-conspirators with Defendants and have performed acts and/or made statements in furtherance of the conspiracy. Defendants are jointly and severally liable for the acts of their co-conspirators whether named or not named as Defendants in this Complaint.

BACKGROUND ON GSE BONDS

A. GSE Bonds

46. A GSE bond is a bond issued by a so-called Government-Sponsored Enterprise, or "GSE," such as Fannie Mae or Freddie Mac. These bonds do not include those issued by (a) the U.S. Treasury or municipalities; (b) foreign governments or agencies; or (c) supra-national or regional bodies. GSE bonds occupy an important segment of the broader bond market, sitting

between sovereign issues (*e.g.*, U.S. Treasury bonds) on the one hand and private credit issuers (*e.g.*, corporate bonds) on the other.

47. The Omnibus Reconciliation Act of 1990 defines a GSE as "a corporate entity created by a law of the United States," which:

> (A) (i) has a Federal charter authorized by law; (ii) is privately owned, as evidenced by capital stock owned by private entities or individuals; (iii) is under the direction of a board of directors, a majority of which is elected by private owners; (iv) is a financial institution with power to — (I) make loans or loan guarantees for limited purposes such as to provide credit for specific borrowers or one sector; and (II) raise funds by borrowing (which does not carry the full faith and credit of the Federal Government) or to guarantee the debt of others in unlimited amounts; and
>
> (B) (i) does not exercise powers that are reserved to the Government as sovereign (such as the power to tax or to regulate interstate commerce); (ii) does not have the power to commit the Government financially (but it may be a recipient of a loan guarantee commitment made by the Government); and (iii) has employees whose salaries and expenses are paid by the enterprise and are not Federal employees subject to title 5.[6]

48. GSE bonds are structured in different ways to meet the needs of different investors and issuers. The traditional coupon-paying GSE bond permits bondholders to receive an annual interest payment rate until the bond matures. GSEs also issue bonds intended for short-term debt obligations such as no-coupon discount notes that are akin to U.S. Treasury Bills.[7] A GSE may choose to issue no-coupon discount notes at a discount from face value in exchange for not paying interest to the bondholder, with maturities ranging from one day to 360 days, as a short-term debt obligation.[8] GSEs can also offer bonds with changing interest rates

---

[6] Omnibus Budget Reconciliation Act of 1990, 104 Stat. 1388-607, Sec. 13112 (codified as amended at 2 U.S.C. § 622(8)).

[7] *Agency Securities*, FINANCIAL INDUSTRY REGULATORY AUTHORITY ("FINRA"), http://www.finra.org/investors/agency-securities.

[8] BOND MKT. ASS'N, GSE DEBT SECURITIES at 25, http://www.freddiemac.com/debt/pdf/ guide_gse_debtsecurities.pdf.

such as floating rate securities (that will pay bondholders interest at a rate relating to an underlying benchmark) or step-up notes (that will pay bondholders interest at rates that "step up" over time according to a pre-set schedule).[9] Floating rate GSE bonds have their interest rates periodically adjusted to the movement of a benchmark rate, such as the London Interbank Offered Rate ("LIBOR").

49. GSE bonds are typically denominated in U.S. currency. GSE bonds thus are attractive to investors looking for high-quality bonds that often have higher yields than U.S. Treasuries. This case concerns unsecured GSE bonds, *i.e.*, bonds issued by Fannie Mae, Freddie Mac, FFCB, FHLB not formally backed by any collateral outside of the issuing entity. Fannie Mae, Freddie Mac, and FFCB bonds are issued in $1,000 denominations, while FHLB bonds are issued in $10,000 denominations for the first increment and $5,000 denominations thereafter.

50. Generally speaking, "yield" refers to the effective rate of interest being paid on the bond, taking into account the amount actually paid by that purchaser. Which is to say, a bond may make the same exact interest payments over time, calculated based on the original, face value of the bond. But if the bond is sold on the secondary market for more (or less) than its face amount, the new bondholder will in effect be getting a lower (or higher) effective rate of interest. Thus, the "yield" of the bond has an inverse relationship to the "price" paid for the bond, in the literal sense of the amount of money paid to purchase it.

51. Although this Complaint often uses the term "price" to refer generally to the amount of money that is exchanged in a trade, traders typically discuss the price of GSE bonds in terms of "spreads." In this context, the "spread" refers to the difference between the yield on the GSE bond and the yield for comparable U.S. Treasuries. This meaning of "spread" is not to be

[9] *Agency Securities*, FINRA, http://www.finra.org/investors/agency-securities.

confused with the bid-offer "spread," which is the difference between the yield a dealer is willing to buy a bond for, and the yield a dealer is willing to sell a bond for.

B. Issuance of GSE Bonds

52. Defendants are among the largest underwriters of GSE bonds. For instance, Defendants comprise the top seven underwriters of U.S. agency bonds (which include GSE bonds), and 60% or more of the market. And, according to data from Freddie Mac, Defendants were responsible for underwriting the following percentage of medium and long-term Freddie Mac-issued bonds: Barclays (14.3%), Nomura (13.6%), JP Morgan (10%), Wells Fargo (6.5%), BNP Paribas (6%), Deutsche (4.3%), Citi (2.4%), TD Securities (2%), BoA Merrill Lynch (1.2%), HSBC (.6%).

53. Unlike Treasury bonds, which are often issued through auctions, GSE bonds are typically issued through syndication or reverse inquiry.

54. In a syndication, if a GSE wants to issue bonds, it will retain a bank or group of banks to underwrite its bond issue and sell those bonds to investors. The underwriting or managing banks are responsible for working with the GSE and with each other to structure and price the bond, and for finding investors to purchase the bonds at the time of issuance.

55. Freddie, Fannie, and FHLB have dates reserved on the calendar that provide them with the option to bring a new syndicated benchmark-style transaction to the market. These are called "on-the-run GSE bullets"[10] and are marquee transactions for both the issuers and the underwriters that are selected to serve as lead managers. They are the most liquid GSE securities with large notional amounts, usually a minimum of $2 billion.

[10] A "bullet" bond is a debt instrument where the principal is entirely repaid on the maturity date, as opposed to amortizing over the bond's lifetime. Bullet bonds cannot be redeemed early by an issuer, which means they are non-callable.

56. Before the issuers choose the lead managers for an upcoming issuance, they hold discussions with the leading trading desks in the days preceding the issuer's calendar slot to gauge market sentiment and receive feedback on investor interest and other notable flows of GSE securities. Next, the GSE selects a maturity (either two, three, five, or 10 years) to bring to the market based on investor demand, as well as the issuer's need for specific funding. Lead managers are chosen as well.

57. The day the GSE has the option to bring a new deal to market, the GSE will either announce terms for a new deal or tell the market that it is choosing to pass altogether. If a new deal is announced, the names of the lead managers (typically three banks) are released, as well as the maturity date and price guidance in the form of a spread to the underlying Treasury security. A small group of co-managers is also formed.

58. Immediately after the new issuance is announced, the order period begins and investors are allowed to place orders. All orders are split among the lead managers and they share equally in the economics of the deal. One manager functions as the book-runner,[11] but all lead managers can see the order book. Based on how the book is developing, price guidance will be fine-tuned. If demand is very strong for the bond, the issue price may be "tightened." This means that the planned yield above Treasuries (the "spread") may be reduced, causing the bonds to effectively pay less interest. This is, in effect, raising prices in the face of high demand. If, on the other hand, demand for the bond comes in weaker than anticipated, then the planned yield over Treasuries may be increased, meaning the bonds will effectively be paying more interest. This is, in effect, lowering prices in the face of weak demand.

[11] The "book runner" is the primary underwriter or lead coordinator in the issuance of new equity, debt, or securities instruments.

59. The issuance is "launched" the morning after it is announced, meaning official pricing will occur later in the morning at the current level of price guidance. Once the pricing call takes place between the issuer and the lead managers, the final terms are announced to the market along with a time when the issue will be "free-to trade" in the secondary market.

60. On the pricing call, the issuer reviews the terms of the trade with the traders/desk heads from the lead managers. Price guidance is officially confirmed and agreed among the GSE issuer and leader managers as the appropriate spread to use based on relative value measurements in the relevant sector of the market, as well as investor demand. Next, the lead managers will spot the yield of the US Treasury note being used in order to generate pricing terms, such as the yield to investors for the new-issue (done by adding the spread to the yield of the Treasury security).

61. Usually, investors will take delivery of the bonds from the hedge manager. The hedge manager is one of the lead managers responsible for facilitating any hedging activity that investors or the issuer needs as related to the transaction. The hedge manager writes a ticket with the issuer at a price equal to the price to the public less fees. Fees to the lead managers for syndicated benchmark issues follow a standardized fee schedule determined by the maturity of the new issue: two-year maturity is 50-62.5 cents per bond; three-year maturity is 75 cents per bond; five-year maturity is $1.00 per bond; and 10-year maturity is $1.50 per bond.

62. For example, if a new issue five-year GSE benchmark bond is priced at a spread of 10 basis points over the five-year treasury note, which is yielding 2.65% per year to investors as the coupon on the bond, the coupon of the GSE benchmark bond would be 2.75%. Investors buy the bond at $100.00 (also called the "re-offer price"). The hedge manager writes a $3 billion

buy ticket with the issuer at an "all-in" price of $99.90 (100.00 less 10 basis points in fees). On a $3 billion deal, the total fees paid to the syndicate managers would be $3 million.

63. None of the lead managers ever takes ownership of the new bonds because they are all sold to investors that gave orders during the order taking period. In fact, lead managers are usually short the new bond at the time of pricing because they allocated more bonds to customers than the size of the deal. This is intentional as it facilitates trading once secondary trading begins and dealers look to cover their short positions. The lead managers can trade with customers that own bonds from the new issue, other dealers, or any other market participants just like any ordinary security trading in the secondary market. At the end of the pricing day, a lead manager may go home short or long the new issue.

64. In a reverse inquiry situation, one or more primary dealers will be approached by one or more investors seeking to fulfill a unique investment need. Alternatively, a primary dealer may perceive an opportunity to structure a debt instrument to meet a need by one or more of its clients. In both of these situations, the primary dealer or dealers will structure the bond in terms of amount, interest rate, maturity, and other variables, and approach one or more GSEs with the proposed bond. If the GSE agrees to issue the bond, the transaction will move forward. If not, the bond will not be issued.

65. Because they issue debt so frequently, the GSEs provided regular updates of their funding targets to approved dealers (which included almost every major bank and some regional ones). These funding targets were typically provided as a spread to LIBOR. For example, Freddie Mac might have a funding target of LIBOR minus 15 basis points for a bond that has a maturity of five years and is callable in one year (*i.e.*, a "5NC1" bond). Simultaneously to Freddie Mac issuing the 5NC1 fixed rate bond, it would enter into an interest rate swap maturing

in five years and cancellable in one year. The respective structures of the bond and swap are an exact match, giving Freddie Mac an effective borrowing cost of LIBOR minus 15 basis points. The ability to structure any type of bond for the buy-side customer as long as it swaps back to the GSE issuer's LIBOR funding target gave the dealer a high degree of flexibility when responding to reverse inquiries. The high degree of flexibility coupled with the lack of ethical walls between the primary issuance and secondary trading functions made it easy for Defendants to perpetuate the conspiracy.

66. Issuances of unsecured bonds by Fannie Mae, Freddie Mac, FFCB, and FHLB rose steadily in the years leading up to the financial crisis. By 2010, issuances peaked at approximately $1.4 trillion. Thereafter, however, issuances began to decline such that total issuances in 2018 were "only" approximately $650 billion.

C. The Secondary GSE Bonds Market

67. GSE bonds are bought and sold in the secondary market. After being issued, GSE bonds can be re-sold and traded by dealers and investors, including by sovereign wealth funds, central banks, pension funds, mutual funds, and hedge funds. Unlike with major exchanges such as the Nasdaq or the New York Stock Exchange, there is no open, anonymous exchange that matches GSE bond buyers and sellers at the best available price. Rather, investors trade GSE bonds over-the-counter, or "OTC," meaning that investors seeking to trade GSE bonds must transact with dealers, such as the Defendants, who provide liquidity by being willing to buy and sell GSE bonds.

68. A dealer in GSE bonds quotes prices at which it stands ready to buy or sell. When a customer looks to buy or sell a bond, it asks a dealer for a quote. A quote consists of a "bid" or an "offer" on a particular GSE bond. The "bid" is the price at which the dealer is willing to buy the specific GSE bond. The "offer" is the price at which the dealer is willing to

sell the indicated GSE bond. The difference or margin between the bid and offer is the "bid-offer spread." The bid-offer spread is the dealer's compensation.

69. Bid-offer spreads are the primary way banks compete against each other for customers. Customers want narrower spreads, meaning, they want to buy bonds for less and sell them for more. By quoting narrower (or "lower") spreads, Defendants can win sales, gain customers, and build market share. Conversely, widening (or "higher") spreads results in losses to consumers.

70. Most investor trading of GSE bonds during the Class Period occurred in a so-called "voice" environment, meaning that transactions were executed over the telephone or via electronic chat messaging. In a typical voice trade, an investor contacts one or more dealers' sales desks to request a quote. The dealer's sales desk communicates the request to the GSE bonds desk, which returns a quote that the sales desk relays back to the investor. The process typically takes several minutes. The time gap between quote requests and order executions provide Defendants with ample lead time to collude in chat rooms, via instant messaging services, or over the telephone.

71. To a lesser degree, investors also use electronic trading platforms to execute orders with dealers. Electronic trading platforms include single-dealer systems, as well as multi-dealer platforms, such as MarketAxess, Tradeweb, and Bloomberg BondTrader. Multi-dealer platforms enable investors to request quotes from multiple dealers simultaneously, using a request for quote ("RFQ") protocol that effectively replicates the OTC marketplace.

72. Whether investors transact through electronic trading platforms or by voice, the essential features of the protocol are the same. Investors do not have access to real-time market data to validate whether dealers' quotes are competitive. Rather, investors are forced to rely on

dealers such as Defendants for real-time pricing information on GSE bonds. To find out the price of a GSE bond, an investor must seek a quote from a dealer. In the process, the investor reveals its identity, the specific instrument and volume it wants to trade, and often the direction of the trade.

73. Moreover, multi-dealer trading platforms can be dominated by a small group of dealers. For instance, of the thirteen U.S. agency bond "liquidity providers" reflected on Tradeweb's website, eight are Defendants.

74. An investor interested in buying or selling a GSE bond generally contacts no more than a few dealers. This is because it is time-consuming and laborious to contact dealers via the telephone or instant message, and dealers usually place short expiration times on the quotes they provide. Given these constraints, it is not practical for investors to "shop around" to more than a few dealers at a time. In fact, investors in GSE bonds would often engage with the same limited set of dealers repeatedly. In addition, seeking quotes from too many dealers increases the number of dealers that know of the investor's interest in a given bond. Such visibility into order flow and demand for the bonds increases the chance of "front-running"[12] or other abusive behaviors.

75. The need for investors to transact with dealers generates a steady flow of market information for Defendants, including a wealth of investor-specific information. This valuable information includes, among other things, which bonds an investor holds and in what quantity,

[12] Front-running is the practice of a broker or trader taking action before a large order to gain an economic advantage. For example, a broker receives a request from a client to buy 500,000 shares of XYZ Company. He holds the client's order until after personally executing an order for the same stock for his account and his own order then benefits from the price movement caused by the large order – this also slows down the order for the entity that is "front-run" and likely makes it less advantageous for the entity that is "front-run" that it otherwise would have been.

whether it is an ongoing buyer or seller of certain bonds, and the price levels at which it has traded or is seeking to trade. The market information dealers collect through the customer inquiry process is a critical component in dealers' analysis of the market. The information is proprietary, confidential, and extremely valuable. In a competitive market, where dealers actually compete against each other, no dealer would forfeit its competitive advantage by disclosing such sensitive information to another dealer.

I. DEFENDANTS FAILED TO SEPARATE THEIR SYNDICATION FROM SECONDARY-MARKET FUNCTIONS, INVITING IMPROPER COLLUSION

76. At most banks that underwrite and trade bonds, there is a clear structural delineation between the bond syndication desk and the bond trading desk. Those who work on the syndication desk specialize in securing, structuring, underwriting, pricing and selling new bond issuances, but do not trade bonds in the secondary market. Conversely, those who work on the bond trading desk specialize in trading bonds but are typically not involved in securing, structuring, underwriting, pricing, and selling new bond issuances.

77. This structural separation between the bond syndication and trading desks makes sense from a legal compliance perspective. In the syndication stage, the dealers retained by the issuer to underwrite the new bond issuance are expected to work together closely—sharing information and strategy on bond structure, pricing, and demand. In theory, once the underwriting dealers agree on the price of a bond, all of them offer the bond to customers at the issue price during the syndication period. They then coordinate on when to end the syndication period and allow the bond to trade freely (*i.e.,* "free to trade"). Depending on the type of GSE deal (a large benchmark issuance versus a smaller reverse inquiry deal), the syndication period can last anywhere from approximately 24 hours (large, benchmark issuances) to a week or more

(smaller, reverse inquiry issuances). Generally, once the bonds became "free to trade," the syndication desk's responsibilities end and the trading desk takes over.[13]

78. But, on information and belief, this important structural division between the syndication desk and the trading desk did not apply to GSE bonds.

79. This elimination of the wall between syndication and trading made no sense from a legal compliance perspective and made the market for GSE bonds ripe for collusion. The same people who constantly talked and coordinated with other dealers regarding actual and potential new issues of GSE bonds were the very same people who traded the bonds after they hit the secondary market. Despite investor expectations, no distinction was enforced between coordinating on new issuance and coordinating on trading. To traders on Defendants' GSE bonds desks, coordination was the normal *modus operandi*—whether on new issuances or secondary market trading. To them, there was not a syndication market and a separate trading market; it was all one market where information was freely exchanged and coordination was the norm. In this way, the very structure of the GSE bonds market lent itself to Defendants' conspiracy.

80. Electronic chatrooms, popular among traders employed by Defendants, offer an effective method through which the Defendants can coordinate their behavior, including in the market for GSE bonds. Specifically, cartel members can use Instant Bloomberg—an instant messaging system available on terminals that Bloomberg LP leases to financial firms—to create standing chat rooms. They can access these standing chat rooms throughout the day to conspire to rig the market to their maximum advantage in real time. In addition to these standing chat

[13] At that point, investors expect that traders buying and selling bonds in the secondary market will not be coordinating with each other, but will instead be competing to transact with investors at the best possible prices.

rooms, cartel members can set up temporary chat rooms that are created for a limited purpose and then closed.

81. Chat rooms make collusion very easy. In chat rooms, cartel members can maintain a running commentary in real time about investors' inquiries and orders and their own positions and strategies. They can coordinate extraordinarily quickly, within seconds, whenever an opportunity arises to coordinate how they will respond to customer inquiries to avoid competition and to fix prices. Cartel members can communicate with each other in these chat rooms continuously, virtually every trading day and all throughout the day.

II. DEFENDANTS CONSPIRED TO MANIPULATE THE SPREADS OF GSE BONDS

82. The fundamental agreement among Defendants was that they would not compete against each other in the market for GSE bonds. They agreed instead to cooperate to maximize their own profits at the expense of their customers, many of whom they shared in common (and for whose business they were supposed to be competing). Defendants' overarching objective was to ensure that cartel members could transact in GSE bonds with their investor clients at prices more favorable for the conspiring dealers—and thus worse for their customers— than would have been achieved in the absence of the collusion.

83. Defendants can execute their conspiracy by secretly communicating with each other in person, via electronic chatrooms (using, for example, the Instant Bloomberg platform), instant messaging, and telephone. Through these means, Defendants can communicate continuously about the GSE bond market throughout the trading day, with a constant focus on how they could continue to rig it to their advantage and disadvantage members of the Class. Defendants' GSE bond traders can keep in constant communication via electronic messaging and chat rooms, telephone calls, and in-person meetings.

84. Constant communications permit Defendants to obtain current information on each other's GSE bond inventories, positions, customers, and pricing. Amassing and sharing of confidential information between dealers that are supposed to be competing provides an effective mechanism for Defendants to facilitate a conspiracy by: (a) giving Defendants a huge informational advantage over their customers, (b) allowing them to position their books to take advantage of customer trading strategies, and (c) monitoring adherence to the conspiracy.

85. Governmental regulators had discovered multiple cartels, such as in the foreign exchange market, which relied heavily on these chatrooms. These investigations into Defendants' participation in these cartels have shown that Defendants have turned a blind eye to the illicit use of such chat rooms to facilitate and enforce collusion, and have focused instead on their bottom line.

86. Law enforcement authorities and regulatory agencies in the United States are actively investigating Defendants' conspiracy in the GSE market. On June 1, 2018, Bloomberg first reported that the DOJ had launched an investigation into possible manipulation in the GSE market, focusing on "whether traders at banks coordinated with one another in order to benefit the institutions they work for. Investigators are looking at potential fraud and antitrust violations."[14] According to the report, "[p]rosecutors from the Justice Department's antitrust division and criminal division are working on the investigation."[15] Based on FINRA records, it appears that Defendant BNP Paribas is one of the banks targeted by the investigation.

---

[14] David McLaughlin & Tom Schoenberg, *U.S. Opens Criminal Probe Into Trading in Fannie, Freddie Bonds*, BLOOMBERG (June 1, 2018), https://www.bloomberg.com/news/articles/2018-06-01/trading-in-fannie-freddie-bonds-is-said-to-be-probed-by-u-s.

[15] *Id*.

87. As discussed upon below, the wrongdoing here is just the latest in a trend. For example, as recently as January 31, 2018, the European Commission announced it had served Statements of Objection on eight banks based on "its preliminary view that they have breached EU antitrust rules by colluding . . . to distort competition when acquiring and trading European government bonds."[16] The Commission found the banks' "contacts would have taken place mainly—but not exclusively—through online chat rooms."[17] A month earlier, the Commission announced Statements of Objection issued to four banks—including Defendant Deutsche Bank here—expressing "its preliminary view that they have breached EU antitrust rules by colluding . . . to distort competition in secondary market trading in the EEA of supra-sovereign, sovereign and agency (SSA) bonds denominated in US Dollars."[18] Again, the Commission found that the bank's "contacts would have taken place mainly through online chat rooms."[19] Time and again, government regulators have found cartels in the financial markets coordinated by a relatively small number of traders using electronic chat rooms.

88. Defendants' collusion was also facilitated by the close-knit nature of the market. GSE traders are a tightknit community, and they regularly socialize at events hosted by issuers and brokers, who facilitate trades between banks. The collegial nature of the GSE market

---

[16] *Antitrust: Commission sends Statement of Objections in European government bonds cartel*, EUROPEAN COMMISSION (Jan. 31, 2019), http://europa.eu/rapid/press-release_IP-19-804_en.htm.

[17] *Id*.

[18] *Antitrust: Commission sends Statement of Objections in US Dollar supra-sovereign, sovereign and agency bond trading cartel*, EUROPEAN COMMISSION (Dec. 20, 2018), http://europa.eu/rapid/press-release_IP-18-6895_en.htm.

[19] *Id*.

enabled Defendants' conspiracy by providing Defendants with additional opportunities to collude even outside work.

89. As a direct and proximate result of the conspiracy, Plaintiffs and each Class member transacted in artificially inflated bid-offer spreads on their GSE bond transactions with Defendants. At the same time, Defendants reaped massive, supra-competitive profits on GSE bond trades that if not for their conspiracy would have had smaller margins.

III. THE ECONOMIC LITERATURE SHOWS THAT DEFENDANTS' ACTIONS IN REDUCING DEALER COMPETITION IN THE GSE MARKET WOULD HARM CLASS MEMBERS BY INCREASING SPREADS.

90. Defendants' collusion harmed Class members on GSE bond transactions during the Class Period. As defined below, the Class is composed of those investors, including pension funds, state funds, university endowment funds, hedge funds, insurance companies, corporate treasuries, fiduciary and depository institutions, small banks, individuals, and money managers, who executed GSE bond trades with Defendants and their co-conspirators during the Class Period, within the flow of U.S. commerce.[20]

91. By colluding, Defendants were able to transact with their investor clients at prices that were more favorable for the conspiring dealer—and thus worse for the customer—than would have been achieved in the absence of the collusion. That was, after all, the reason they conspired. Defendants unlawfully conspired day after day because it allowed them to make more money from customer transactions than they could have made without colluding.

92. The nation's economy relies on free market competition because it is a basic premise of economics that competition results in better prices and higher product quality for

[20] Although Defendants' cartel impacted the entire GSE bond market by fundamentally disrupting competition in the market overall, this case is limited to those investors who had the misfortune to trade directly with the cartel members—that is, the Defendants.

consumers.[21] This basic economic premise holds especially true in financial markets. It is well settled that in financial markets, like the market for GSE bonds, consumers suffer harm in the form of worse prices when dealers do not compete.

93. Defendants' collusion harmed their customers because it greatly diminished the amount of dealer competition in the market. Defendants' conspiracy, in effect, reduced how many trading desks were competing in the market for customer business. Dealer competition in the market for GSE bonds was significantly suppressed, leading to wider spreads.

94. The academic literature has long established that more competition among dealers reduces spreads and prices paid by investors in financial markets. Conversely, less competition among dealers widens spreads and prices. As Professor Darrell Duffie, one of the world's leading experts on OTC market structure, explained as part of the Thirteenth Baffi Lecture presented at the Banca d'Italia in Rome, on September 15, 2017: "Well-established economic theory implies that markets are more efficient and investors receive better pricing when more market participants compete for trade at the same venue. Most obviously, from the viewpoint of a quote seeker, the best price from among a small set of bidders is not as attractive as the best price available from an enlarged set of bidders."[22]

---

[21] *N. Pac. Ry. Co.*, 356 U.S. at 4 ("The Sherman Act was designed to be a comprehensive charter of economic liberty aimed at preserving free and unfettered competition as the rule of trade. It rests on the premise that the unrestrained interaction of competitive forces will yield the best allocation of our economic resources, the lowest prices, the highest quality and the greatest material progress, while at the same time providing an environment conductive to the preservation of our democratic political and social institutions.").

[22] Darrell Duffie, *Bank Debt Overhang and Financial Market Liquidity*, THIRTEENTH PAOLO BAFFI LECTURE, 67 (2017) ("Baffi Lecture"). The Bank of Italy's Paolo Baffi Lecture is one of the most prestigious money and finance lecture series in the world. The Baffi Lecture is devoted to promoting scholarly writings that advance theoretical and applied analysis in the field of economics. The lecturers, selected by a committee of distinguished economists and civil servants, are preeminent scholars and leaders in their field that offer original contributions to a wide variety of issues related to money and finance.

95. Professor Duffie highlighted, for example, a study of bond trading platforms by Terry Hendershott and Ananth Madhavan which found empirical support for the theoretically anticipated relationship between the number of dealers providing quotes on a corporate bond trading platform and the expected cost to the quote requestor (i.e., the investor), controlling for other factors. Their analysis concluded that expected trading costs for investors declines rapidly with the number of dealers providing quotes, as displayed in the following figure:[23]

[23] Terrence Hendershott and Ananth Madhavan, *Click or Call? Auction Versus Search in the Over-the-Counter Market*, 50 J. FIN. 419, 441 (2015). The authors document that this decline in trading costs as the number of responding dealers increase remains statistically strong even after controlling for differences in bond and trade characteristics (Table VIII at 442). The authors also observe: “Dealers in quote-driven systems face adverse selection because their binding bids and offers provide free options to the market. Adverse selection is more severe in thinly traded securities where it is costly to continuously monitor quotes to ensure they are not stale. There is also the potential for tacit collusion among dealers who observe each other’s quotes.” *Id*. at 445.

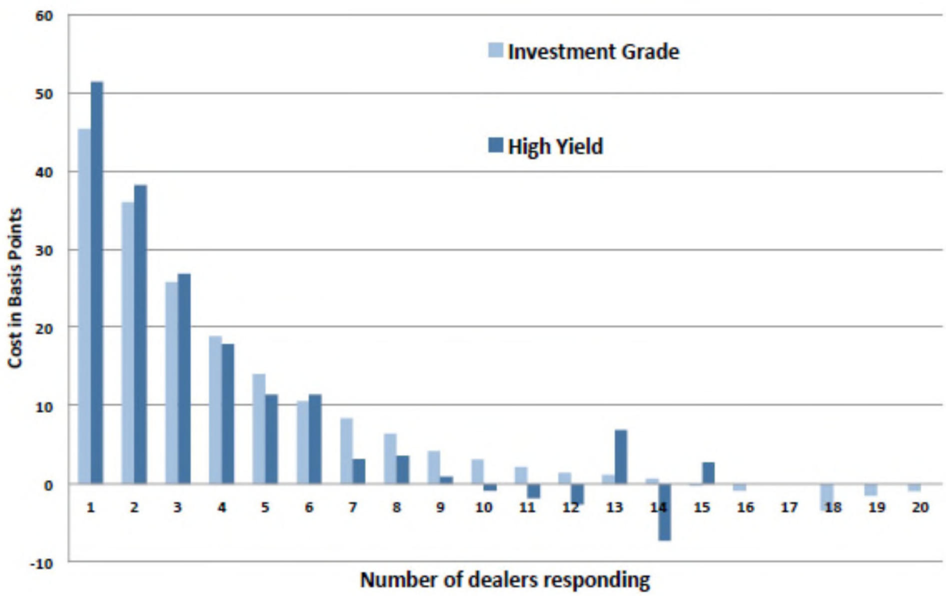

Figure 4.2.2: How transaction costs vary with the number of dealers responding to a request for quotes. Source: Hendershott and Madhavan (2015). The figure shows costs in basis points of notional amount, by the number of dealer responses in all electronic auctions on Market Axess in the sample with at least one response, broken down for investment-grade (IG) and high-yield (HY) bonds. Data are from January 2010 through April 2011, excluding all interdealer trades.

96. This figure demonstrates that costs decrease every time an additional dealer responds to a request for quotes, which illustrates that removing even a single dealer from a market is expected to reduce competition and increase prices.

97. Numerous additional studies have shown how increased competition among dealers reduces transaction costs for bond market participants. In a study of corporate bond transactions, Anthony Saunders, Anand Srinivasan, and Ingo Walter found that when more dealers responded to a request for quotes on a transaction, the resulting quotes were more

competitive.[24] Specifically, the authors found that the difference between the winning bid and the second-best bid was smaller when more dealers competed for the transaction.[25]

98. In yet another published research paper, Yee Cheng Loon and Ken Zhong demonstrated that the greater the number of dealers competing to make markets for credit default swaps, the lower are the effective bid-offer spreads—and therefore the more favorable are the transaction prices—realized by customers for those swaps, again controlling for other factors. As the authors concluded: "*Increased competition among dealers for order flow reduces bid-ask spreads and improves liquidity*."[26] A wealth of academic literature has similarly concluded that competition among dealers reduces spreads paid by investors in OTC markets and otherwise.[27]

---

[24] Anthony Saunders, Anand Srinivasan & Ingo Walter, *Price Formation in the OTC Corporate Bond Markets: A Field Study of the Inter-Dealer Market*, 54 J. ECON. &BUS. 95, 111 (2002).

[25] *Id*. at 106 & tbl.6a. The authors analyzed a randomly selected sample of bond trades conducted by a major dealer in the OTC corporate bond market from January 1, 1997 to November 28, 1997. These trades were carried out as auctions, with telephone bids received from multiple dealers who were competing for the transaction; the data from the dealer book provides the names of all the bidding dealers, prices quoted by these dealers and the price of the winning bid. *Id.* at 98. The authors found that "an increase of one additional bidder reduces the price difference between the best and second-best bids by 23.6%." *Id.* at 102 & tbl.5.

[26] Yee Cheng Loon & Ken Zhong, *Does Dodd-Frank affect OTC transaction costs and liquidity? Evidence from the real-time CDS trade reports*, 119 J. FIN. ECON. 645, 651 (2016).

[27] *See, e.g.*, M. Tinic & Richard R. West, *Competition and the Pricing of Dealer Service in the Over-the-Counter Stock Market*, 7 J. FIN. & QUANTITATIVE ANALYSIS 1707, 1709 (1972) ("In brief, our principal conclusion is that increases in the amount of interdealer competition in this [OTC] market tend to reduce the price of dealer services (reduce spreads) and thus, tend to increase the marketability of issues."); Yakov Amihud & Haim Mendelson, *Asset pricing and the Bid-Ask Spread*, 17 J. FIN. ECON. 223, 224 (1986) (noting that "the relative spread on stocks has been found to be negatively correlated with liquidity characteristics such as the trading volume, the number of shareholders, the number of market makers trading the stock and the stock price continuity"); Seha Oleg Bondarenko, *Competing market makers, liquidity provision, and bid–ask spreads*, 4 J. FIN.MKTS 269, 273 (2001) (finding that "the bid-ask spreads resulting from noncooperative but imperfect competition will usually be much narrower than those resulting from explicit collusion, in which market makers cooperate to fix prices"). In a study of the foreign exchange markets—which, like the market for GSE bonds, are also OTC markets where large financial institutions act as dealers—Carol Osler, Geir Bjonnes, and Neophytos Kathitziotis

99. As Professor Duffie explained, when an OTC dealer perceives that an investor client lacks attractive outside options to obtain quotes, "the dealer can widen its bid-offer spread accordingly."[28]

100. In short, the academic literature repeatedly concludes that a reduction in competition leads to wider bid-offer spreads.

101. The calculation of Class member damages in this case will necessarily be informed by discovery and expert analysis. Well-known methods exist for estimating the extent to which prices are affected by collusion of the type that occurred here, and will be applicable in this case. For example, damages likely can be quantified by comparing the bid-offer spreads paid by Class members in the actual world (the world affected by the conspiracy) to the spreads paid on comparable instruments after the period of collusion ended, while controlling for other (non-collusive) factors which can also impact bid-offer spreads. The research literature on bonds and other OTC financial instruments provides guidance on other factors that can impact spreads and how to control for these factors in a statistical model so as to isolate the reduction in bid-offer spreads that occurred at the end of the collusion, thus isolating the impact of the collusion on the transactions prices of GSE bonds.[29]

---

showed that transaction costs for customers in foreign exchange transactions are lower in multi-bank electronic platforms, where several dealers compete simultaneously to provide quotes in response to the customer's request, than in single-bank platforms or in direct transactions with desks of individual dealers. *See* Carol Osler, Geir Bjonnes, and Neophytos Kathitziotis, *Bid-Ask Spreads in OTC Markets*, 33, tbl.3 (Brandeis Univ. Working Paper No. 102, 2016). The authors found that multi-bank platforms provide the lowest transaction costs—measured as the difference between the price paid by the consumer on a transaction and the interbank quote at the time of the transaction—because they facilitate more competition among dealers. *Id*. at 10-11.

[28] Baffi Lecture, at 64.

[29] *See, e.g.*, Thomas Copeland & Dan Galai, *Information Effects on the Bid-Ask Spread*, 38 J. FIN. 1457, 1457-68 (1983); Richard Roll, *A Simple Implicit Measure of the Effective Bid-Ask Spread in an Efficient Market*, 39 J. FIN. 1127, 1127-35 (1994); Sugato Chakravarty & Asani Sarkar, *Trading Costs in Three U.S. Bond Markets*, 13 J. FIXED INCOME 39, 39-48

102. As another example of analysis that could be applied on a class wide basis, the profit margins and spreads on similar types of bonds or investment vehicles in a competitive market with a similar number of dealers over a similar period could be used to establish a benchmark of what spreads and profit margins should look like.

IV. DEFENDANTS' CONDUCT IN THE MARKET FOR GSE BONDS IS THE LATEST EXAMPLE OF THEIR COLLUSION IN THE FINANCIAL SYSTEM

103. Defendants' conduct in the market for GSE bonds is just the latest in a long string of revelations about their anticompetitive activities in our financial system. With each passing scandal, it becomes clear that these are not isolated events, but rather that "cross-talk" on electronic platforms, to arrange manipulative trading strategies, was for years viewed as normal operating procedure by Defendants and others in the banking industry.

A. Investigations into the Manipulation of SSA Bonds

104. In December 2015, there were reports that the DOJ had launched an investigation into collusion in the supranational, sovereign, and agency bonds ("SSA bonds") market.[30] A month later, on January 6, 2016, the Financial Times and International Financing Review confirmed the DOJ's probe, the latter indicating that the DOJ was looking at "possible manipulation of bond prices."[31]

(2003); Hendrik Bessembinder, William Maxwell, & Kumar Venkataraman, *Market Transparency, Liquidity Externalities, and Institutional Trading Costs in Corporate Bonds*, 82 J. FIN. ECON. 251, 257-82 (2006); Amy K. Edwards, Lawrence E. Harris & Michael S. Piwowar, *Corporate Bond Market Transaction Costs and Transparency*, 62 J. FIN. 1421, 1426-49 (2007).

[30] David McLaughlin & Tom Schoenberg, *U.S. Said to Probe Possible Rigging in Agency Bond Market*, BLOOMBERG (Dec. 9, 2015), http://www.bloomberg.com/news/articles/ 2015-12-09/u-s-said-to-probe-possible-rigging-in-agency-bond-market.

[31] Abhinav Ramnarayan & Helene Durand, *EXCLUSIVE – DoJ Investigates Bond Traders Over Market-Rigging*, INT'L FIN. REV. (Jan. 6, 2016), www.ifre.com/exclusive-dojinvestigates- bond-traders-over-market-rigging/21230385.fullarticle.

105. According to the International Financing Review report, the DOJ was "investigating allegations that SSA traders at different banks agreed [on] prices and shared information on certain US dollar bonds in chat rooms they established for the purpose."[32] According to a Bloomberg report, "Prosecutors have obtained transcripts of online chat room conversations indicating possible misconduct and have contacted banks, asking them to delve further into the behavior."[33] The DOJ reportedly had sent information requests to Nomura, among others.[34]

106. On January 20, 2016, Bloomberg reported that the U.K. Financial Conduct Authority, which previously had been assisting the DOJ, had started its own investigation into collusion in the SSA market.[35] On February 9, 2016, the Financial Times reported that in addition to the DOJ and Financial Conduct Authority, the European Commission had also opened a cartel investigation into possible collusion in the SSA market.[36] Citigroup has noted in its Form 10-K filings that its SSA bond trading activities were under investigation.[37]

---

[32] *Id*.

[33] David McLaughlin & Tom Schoenberg, *U.S. Said to Probe Possible Rigging in Agency Bond Market*, BLOOMBERG (Dec. 9, 2015), http://www.bloomberg.com/news/articles/ 2015-12-09/ u-s-said-to-probe-possible-rigging-in-agency-bond-market.

[34] Craig McGlashan, Owen Sanderson, Ralph Sinclair & Toby Fildes, *Scandal Rocks SSA Market*, GLOBAL CAP. (Jan. 7, 2016), www.globalcapital.com/article/vydmn22frhms/ trading-scandal-rocks-ssa-market.

[35] Suzi Ring & Tom Schoenberg, *U.K. Said to Open Probe Into Rigging of Agency-Bonds Market*, BLOOMBERG (Jan. 20, 2016), https://www.bloomberg.com/news/articles/ 20160120/ agencybondrigging probesaidtoexpandasukopensinquiryijmri0ov.

[36] Jim Brunsden, *EU Probes Suspected Rigging of $1.5tn Debt Market*, FIN. TIMES (Feb. 9, 2016), https://next.ft.com/content/04befd8a-cf35-11e5-92a1-c5e23ef99c77.

[37] Citigroup, Inc., Form 10-K at 296 (2016), https://www.sec.gov/Archives/edgar/data/ 831001/000083100117000038/c-12312016x10k.htm ("Government and regulatory agencies in the U.S. and in other jurisdictions are conducting investigations or making inquiries regarding Citigroup's sales and trading activities in connection with sovereign securities. Citigroup is fully cooperating with these investigations and inquiries.").

107. In February 2017, Bloomberg reported that the DOJ and the U.K.'s Financial Conduct Authority ("FCA") investigations "are escalating as authorities seek to interview traders."[38] According to Bloomberg, U.S. prosecutors "obtained transcripts of online chat-room conversations indicating possible misconduct" and are pressing forward with a criminal probe.[39] Later, in October 2017, Bloomberg reported that the FCA had "closed" its "two-year investigation" by sending non-public letters to four "traders at the center of the probe," and that the FCA had provided "[n]o details on why the probe had been closed."[40]

108. On December 20, 2018, the European Commission announced that it had issued Statements of Objection to four banks concerning their trading of USD SSA Bonds—including Defendants Deutsche Bank and Bank of America.[41] The Statements express the Commission's "preliminary view that they have breached EU antitrust rules by colluding, in periods from 2009 to 2015, to distort competition in secondary market trading in the EEA of supra-sovereign, sovereign and agency (SSA) bonds denominated in US dollars."[42] Notably:

---

[38] Suzi Ring & Tom Schoenberg, *Agency Bond Traders Said to Face Questions in Rigging Probe*, BLOOMBERG (Feb. 1, 2017), https://www.bloomberg.com/news/articles/2017-02- 01/agency-bond-traders-said-to-face-questions-in-rigging-probe-iyn8sg38.

[39] *Id.*

[40] Suzi Ring, *Agency Bond-Rigging Probe is Said to Be Dropped by Britain's FCA*, BLOOMBERG (Oct. 31, 2017), https://www.bloomberg.com/news/articles/2017-10-31/agencybond- rigging-probe-is-said-to-be-dropped-by-britain-s-fca.

[41] *Antitrust: Commission sends Statement of Objections in US Dollar supra-sovereign, sovereign and agency bond trading cartel*, EUROPEAN COMMISSION (Dec. 20, 2018), http://europa.eu/rapid/press-release_IP-18-6895_en.htm; Aoife White, et al., *Deutsche Bank, Credit Suisse Targeted by EU Bond Probe*, BLOOMBERG (Dec. 20, 2018), https://www.bloomberg.com/news/articles/2018-12-20/four-banks-targeted-by-eu-antitrustobjections- over-ssa-bonds.

[42] *Antitrust: Commission sends Statement of Objections in US Dollar supra-sovereign, sovereign and agency bond trading cartel*, EUROPEAN COMMISSION, (Dec. 20, 2018), http://europa.eu/rapid/press-release_IP-18-6895_en.htm.

> The Commission has concerns that at different periods between 2009 and 2015, the four banks exchanged commercially sensitive information and coordinated on prices concerning US dollar denominated supra-sovereign, sovereign and agency bonds, known as "SSA bonds". These contacts would have taken place mainly through online chatrooms.[43]

Under European competition law, a Statement of Objections carries great weight—it is issued only after an "in-depth investigation confirms the Commission's competition concerns."[44] Defendant Deutsche Bank has admitted it has "proactively cooperated with the European Commission in this matter" in exchange for prosecutorial immunity.[45]

109. To date, three Defendant banks—including Defendants Bank of America, Deutsche Bank, and HSBC—have agreed to pay approximately $100 million to settle private antitrust claims alleging they conspired to rig the SSA bond market.[46]

B. Investigation into manipulation of European government bonds

110. On December 20, 2018, the European Commission announced that it had issued Statements of Objection to eight banks concerning the "European government bonds cartel."[47] European government bonds are sovereign bonds issued in Euros by the central government of the Eurozone member states. The Commission informed the banks of "of its preliminary view

---

[43] *Id*.

[44] *Procedures in anticompetitive agreements*, EUROPEAN COMMISSION, http://ec.europa.eu/competition/antitrust/procedures_101_en.html (last visited Feb. 15, 2019).

[45] *Statement on antitrust investigation of the European Commission* DEUTSCHE BANK, (Dec. 20, 2018), https://www.db.com/newsroom_news/2018/statement-on-antitrustinvestigation-of-the-european-commission-en-11752.htm.

[46] Joseph Stempel, *HSBC to pay $30 million to settle bond rigging lawsuit in U.S.*, REUTERS (Jan. 10, 2019), https://www.reuters.com/article/us-hsbc-settlement-bonds/hsbc-to-pay- 30-million-to-settle-bond-rigging-lawsuit-in-u-s-idUSKCN1P41W3.

[47] *Antitrust: Commission sends Statement of Objections in European government bonds cartel*, EUROPEAN COMMISSION, (Jan. 31, 2019) http://europa.eu/rapid/press-release_IP-19-804_en.htm.

that they have breached EU antitrust rules by colluding, in periods from 2007 to 2012, to distort competition when acquiring and trading European government bonds."[48] Specifically, it noted:

> The Commission has concerns that, at different periods between 2007 and 2012, the eight banks participated in a collusive scheme that aimed at distorting competition when acquiring and trading European government bonds ("EGBs"). Traders employed by the banks exchanged commercially sensitive information and coordinated on trading strategies. These contacts would have taken place mainly—but not exclusively—through online chatrooms.[49]

C. Investigations into the FX Market

111. Beginning in the fall of 2013, media reports surfaced that government regulators were investigating potential manipulation of the foreign exchange ("FX") market. These investigations quickly grew in scope to include authorities from across the globe. Again, many of these claims were uncovered in part through econometric analysis of the type performed here, i.e., an analysis of trading patterns and price movements.

112. In May 2015, Defendant Barclays, Defendant Citi, Defendant JPMorgan, RBS, and UBS were fined a total of $3 billion by the DOJ, and each pled guilty to criminal conspiracy charges for manipulating FX rates.[50] The DOJ settlements followed a series of Orders from November 2014, where the Commodity Futures Trading Commission ("CFTC") and FCA imposed over $3.2 billion in fines on Defendant Citi, Defendant HSBC, Defendant JPMorgan, RBS, and UBS for manipulating the FX market; the Office of the Comptroller of the Currency

---

[48] *Id.*

[49] *Id.*

[50] Plea Agreement, *United States v. Barclays*, No. 15-cr-00077 (D. Conn. May 20, 2015); Plea Agreement, *United States v. Citicorp*, No. 15-cr-00078 (D.Conn. May 20, 2015); Plea Agreement, *United States v. The Royal Bank of Scotland*, No. 15-cr-00080 (D.Conn. May 20, 2015); Plea Agreement, *United States v. UBS AG*, No. 15-cr-00076 (D. Conn. May 20, 2015); Order Instituting Proceedings Pursuant to Sections 6(c) and 6(d) of the Commodity Exchange Act, In the Matter of Barclays Bank PLC, CFTC Dkt. No. 15-25 (May 20, 2015).

("OCC") fined Defendant Bank of America, Defendant Citi, and Defendant JPMorgan another $950 million; and the Financial Market Supervisory Authority ("FINMA") fined UBS $141 million. On January 25, 2018, Defendant BNP Paribas pleaded guilty to conspiring to fix prices in the FX market in violation of the Sherman Act.[51] Other authorities across the globe are also actively investigating the banks' manipulation of the FX market, including the U.S. Federal Reserve and the Securities Exchange Commission.

113. The settlements entered to date lay out the details of how the banks colluded to manipulate FX prices to their benefit. For instance, the CFTC found that Defendant Citi, Defendant HSBC, Defendant JPMorgan, RBS, and UBS "used private electronic chat rooms to communicate and plan their attempts to manipulate the Forex benchmark prices."[52] Bank traders used those inter-bank chat rooms to "coordinate[] their trading with certain FX traders at other banks to attempt to manipulate certain FX benchmark rates," and to "disclose[] confidential customer order information and trading positions, alter[] trading positions to accommodate the interests of the collective group, and agree[] on trading strategies as part of an effort by the group to attempt to manipulate certain FX benchmark rates."[53] Those exclusive chatrooms were often given colorful names like "The Cartel," "The Mafia," "The Club," "The Bandits' Club," "The Dream Team," "One Team, One Dream," and "The Sterling Lads."[54]

D. Investigations into the Rigging of LIBOR

[51] DOJ Press Release, *BNP Paribas US Inc. Pleads Guilty to Antitrust Conspiracy* (Jan. 26, 2018), https://www.justice.gov/opa/pr/bnp-paribas-usa-inc-pleads-guilty-antitrustconspiracy.

[52] *In the Matter of Citibank, N.A.*, Order Instituting Proceedings, CFTC Dkt. No. 15-03 (Nov. 11, 2014).

[53] *Id.*

[54] *Id.*

114. One of the first financial benchmarks to draw scrutiny from government regulators was LIBOR, which was supposed to reflect the rate that banks would pay to borrow funds in the inter-bank market. Following reports in the media that LIBOR had been manipulated—based on the use of economic "screens" similar to the ones used herein—regulators launched investigations into the conduct of the group of "panel banks" responsible for setting LIBOR.[55]

115. Those investigations have revealed that instead of submitting their honest, expected borrowing costs, the LIBOR panel banks instead submitted deliberately false quotes for the purpose of manipulating the published LIBOR rate. Government investigations have resulted in both criminal and regulatory charges, and have been coordinated between agencies from the United States, the United Kingdom, Canada, Japan, and the European Union.

116. The first panel bank to be formally charged was Barclays. In June 2012, Barclays was fined over $450 million by the CFTC, DOJ, and U.K. Financial Services Authority ("FSA"). Barclays admitted to a detailed Statement of Facts, which cited scores of emails and electronic chat messages in which traders schemed to manipulate LIBOR rates.[56]

117. Later that year, the scandal widened when, for the first time, it was revealed that LIBOR manipulation was not restricted to traders within the panel banks, but also involved collusion between banks, and between banks and interdealer brokers. This revelation occurred in connection with UBS's settlement agreements, wherein UBS was fined over $1.5 billion for its role in manipulating LIBOR rates. Regulators found "[m]ore than 2,000 instances of unlawful

---

[55] Rosa Abrantes-Metz, *How to Use Statistics to Seek Out Criminals*, BLOOMBERG (Feb. 26, 2013), https://www.bloomberg.com/opinion/articles/2013-02-26/how-to-use-statistics-toseek- out-criminals.

[56] DOJ, *Barclays Statement of Facts* (June 26, 2012), http://www.justice.gov/iso/ opa/resources/9312012710173426365941.pdf.

conduct involving dozens of UBS employees, colluding with other panel banks, and inducing interdealer brokers to spread false information and influence other banks," including thousands of requests to manipulate LIBOR in emails and electronic chat messages.[57]

118. The Royal Bank of Scotland ("RBS") was the next bank to fall. In early 2013, it was charged with felony counts of wire fraud and price-fixing in violation of the Sherman Act. RBS admitted that it colluded with other banks to manipulate LIBOR rates. In addition to the $250 million in criminal fines imposed by the DOJ, RBS agreed to pay $325 million in fines and disgorgement to the CFTC, and $137 million to the FSA. Those regulators released many specific examples of RBS's collusive communications—including in the form of emails and instant chat messages—between traders at RBS and other panel banks. As stated before British Parliament by Johnny Cameron, RBS's former Chairman of Global Banking and Markets, LIBOR manipulation involved "a cartel of people across a number of banks."[58]

119. On December 4, 2013, the European Commission issued its own set of findings, and fined Barclays, Citigroup, Deutsche Bank, JPMorgan, and RBS a total of $1.7 billion for "participating in cartels in the interest rate derivatives industry."[59] The European Commission found that each of these banks "coordinated with each other" to manipulate LIBOR and related benchmarks, which included discussions of "confidential and commercially sensitive information

---

[57] *CFTC Orders UBS to Pay $700 Million Penalty to Settle Charges of Manipulation, Attempted Manipulation and False Reporting of Libor and Other Benchmark Interest Rates*, COMMODITY FUTURES TRADING COMMISSION (Dec. 19, 2012), http://www.cftc.gov/PressRoom/ PressReleases/pr6472-12.

[58] *Parliamentary Commission on Banking Standards—Minutes of Evidence*, PARLIAMENT (Feb. 11, 2013), http://www.publications.parliament.uk/pa/jt201314/jtselect/jtpcbs/ 27/130211a.htm.

[59] *Antitrust: Commission fines banks € 1.49 billion for participating in cartels in the interest rate derivatives industry*, EUROPEAN COMMISSION (Dec. 4, 2013), http://europa.eu/rapid/ press-release_IP-13-1208_en.htm.

that they are not allowed to share with other market players" and that they "exchanged their pricing and trading strategies and trading positions."[60]

120. More recently, Deutsche Bank was charged with felony counts of wire fraud and price-fixing, and agreed to pay $625 million in fines to the DOJ.[61] The DOJ found that Deutsche Bank conspired with other banks to manipulate LIBOR. Deutsche Bank was also fined $800 million by the CFTC, $344 million by the FSA, and $600 million by the New York Department of Financial Services.

E. Investigations into the Manipulation of ISDAfix

121. ISDAfix is another key interest-rate benchmark, designed to represent current market fixed rates for interest rate swaps of various terms.

122. In 2013, it was revealed that the CFTC,[62] the U.K. Financial Conduct Authority,[63] and the German financial regulator BaFin[64] were actively investigating the manipulation of

---

[60] Joaquín Almunia, *Introductory Remarks on Cartels in the Financial Sector*, EUROPEAN COMMISSION (Dec. 4, 2013), http://europa.eu/rapid/press-release_SPEECH-13-1020_en.htm, at 2.

[61] *Deutsche Bank's London Subsidiary Agrees to Plead Guilty in Connection with Long-Running Manipulation of Libor*, DOJ (Apr. 23, 2014), http://www.justice.gov/ opa/pr/ deutsche-banks-london-subsidiary-agrees-plead-guilty-connection-long-running-manipulation.

[62] Matthew Leising, *CFTC Said to Subpoena ICAP Brokers, Dealers on Swap Prices*, BLOOMBERG (Apr. 8, 2013), http://www.bloomberg.com/news/articles/2013-04-08/cftc-said-toprobe- icap-treasure-island-brokers-on-swap-prices.

[63] Lindsay Fortado & Matthew Leising, *U.K. Regulator Said to Join CFTC in ISDAfix Manipulation Probe*, BLOOMBERG (Apr. 23, 2013), http://www.bloomberg.com/news/ articles/2013-04-23/u-k-regulator-said-to-join-cftc-in-isdafix-manipulation-probe

[64] Matthew Leising, *Libor Settlements Said to Ease CFTC Path in Rate-Swaps Probe*, BLOOMBERG (Aug. 7, 2013), http://www.bloomberg.com/news/articles/2013-08-06/liborsettlements- said-to-ease-cftc-s-path-in-rate-swaps-probe.

ISDAfix rates.[65] The CFTC was reported to be sifting through over one million emails and instant messages, as it simultaneously interviewed current and former employees of banks and dealers as part of its ISDAfix investigation.[66]

123. In 2014, *Bloomberg* reported that the CFTC had told the DOJ that it had "found evidence of criminal behavior following an investigation into banks' alleged manipulation of ISDAfix[.]"[67] The article stated that the CFTC "has flagged its findings to prosecutors, according to a person familiar with the matter."[68] This led the DOJ and other regulators to launch their own investigations.

124. In May 2015, Barclays reached an agreement with the CFTC to pay $115 million for alleged manipulation of ISDAfix.[69] In May 2016, Citi reached a similar agreement with the CFTC, agreeing to pay $250 million for alleged manipulation of ISDAfix.[70] All the defendant banks—including Defendants BNP Paribas, Deutsche Bank, Nomura, and Wells Fargo—

---

[65] Matthew Leising, *CFTC Said to Subpoena ICAP Brokers, Dealers on Swap Prices*, BLOOMBERG (Apr. 8, 2013), http://www.bloomberg.com/news/articles/2013-04-08/cftc-said-toprobe- icap-treasure-island-brokers-on-swap-prices.

[66] Matthew Leising, *CFTC Said Preparing ISDAfix Probe Talks in Weeks: Credit Markets*, BLOOMBERG (May 21, 2013), http://www.bloomberg.com/news/articles/2013-05-20/cftc-said-to-review-1-million-e-mails-in-isdafix-investigation.

[67] Matthew Leising & Tom Schoenberg, *CFTC Said to Alert Justice Department of Criminal Rate Rigging*, BLOOMBERG (Sept. 9, 2014), http://http://www.bloomberg.com/news/articles/2014-09-08/cftc-said-to-alert-justice-department-of-criminal-rate-rigging-i2z7ngfn.

[68] *Id.*

[69] *CFTC Orders Barclays to Pay $115 Million Penalty for Attempted Manipulation of and False Reporting of U.S. Dollar ISDAFIX Benchmark Swap Rates*, COMMODITY FUTURES TRADING COMMISSION (May 20, 2015), http://www.cftc.gov/PressRoom/PressReleases/pr7180- 15.

[70] *CFTC Orders Citibank to Pay $250 Million Penalty for Attempted Manipulation of and False Reporting of U.S. Dollar ISDAFIX Benchmark Swap Rates*, COMMODITY FUTURES TRADING COMMISSION (May 25, 2016), http://www.cftc.gov/PressRoom/PressReleases/pr7371- 16.

ultimately agreed to pay over $500 million to settle private antitrust claims alleging they conspired to rig ISDAfix rates.[71]

V. DEFENDANTS' CONSPIRACY INJURED PLAINTIFFS AND THE CLASS

125. Defendants' conspiracy inflicted severe financial harm on Plaintiffs and the Class and restrained competition in the market for GSE bonds.

126. As a direct and proximate result of their conspiracy, Defendants inflated their own profits while imposing supra-competitive prices and bid-offer spreads for GSE bonds on Plaintiffs and the Class. Defendants injured each Class member—including pension funds, university endowment funds, hedge funds, insurance companies, corporate treasuries, fiduciary and depository institutions, small banks, and money managers—through a common scheme resulting in potentially billions of dollars in damages.

127. The conspiracy alleged herein had and is having the following effects, among others:

a. GSE bond prices and bid-offer spreads charged to Plaintiffs and the Class have been fixed or stabilized at supra-competitive levels;

b. Plaintiffs and the Class have been deprived of the benefits of free, open, and unrestricted competition in the market for GSE bonds; and

c. Competition in establishing prices and bid-offer spreads paid in the United States for GSE bonds has been unlawfully restrained, suppressed, and eliminated.

128. By reason of the violations of Section 1 of the Sherman Act alleged in this complaint, Plaintiffs and the members of the Class have sustained injury to their business or

[71] Jonathan Stempel, *U.S. rate-rigging payouts top $500 million as final banks settle*, REUTERS (Jun. 25, 2018), https://www.reuters.com/article/us-banks-rigging-settlement/u-s-raterigging- payouts-top-500-million-as-final-banks-settle-idUSKBN1JL1N6.

property. The injuries sustained by Plaintiffs and the Class are the payment of supra-competitive prices and bid-offer spreads for GSE bonds as a result of Defendants' conspiracy to restrain trade as alleged. This is an antitrust injury of the type that the antitrust laws were meant to punish and prevent.

EQUITABLE TOLLING BECAUSE OF DEFENDANTS' CONCEALMENT

129. During the Class Period, Defendants actively, fraudulently, and effectively concealed their conspiracy from Plaintiffs and members of the Class.

130. By its very nature, Defendants' conspiracy was inherently self-concealing. Defendants' ensured that the market for GSE bonds had the appearance of competitiveness. Nevertheless, Defendants conspired to artificially inflate bid-offer spreads to the benefit of Defendants and to the detriment of Plaintiffs and members of the Class, and they further conspired to keep their collusive and manipulative conduct secret.

131. Defendants fraudulently concealed their anticompetitive activities by, among other things, engaging in secret communications in furtherance of their conspiracy. Communications in non-public chat rooms, instant messages, and through email, telephone calls, and in-person meetings, provided Defendants with an opportunity to further their conspiracy, none of which communications would be reasonably available to Plaintiffs or members of the Class.

132. In addition, Defendants actively and jointly concealed their conspiracy. For instance, Defendants agreed among themselves not to publicly discuss or otherwise reveal the nature and substance of the acts and communications in furtherance of the conspiracy.

133. Plaintiffs and the Class did not discover and could not have discovered through the exercise of reasonable diligence either the existence of Defendants' conspiracy or the fact

that they were injured by that conspiracy until at the earliest June 1, 2018 when the DOJ investigation became public news on Bloomberg.

134. None of the facts or information available to Plaintiffs, if investigated with reasonable diligence, could or would have led to the discovery of the conspiracy alleged in this Complaint.

135. There are many additional reasons why these facts could not have been known. GSE bond trades occur primarily in the private, over-the-counter market, and Defendants' trades and trading strategies are not public information. Reasonable due diligence could not have uncovered Defendants' conspiracy because the non-exchange-based, closed, and private nature of the trades helped to conceal Defendants' conduct. Indeed, throughout the Class Period, Plaintiffs and members of the Class regularly monitored news reports concerning the financial industry and the GSE bonds market. Plaintiffs and members of the Class undertook this activity in order to try to buy and sell GSE bonds at good prices. Nonetheless, Plaintiffs and members of the Class did not know of, and could not have known of, Defendants' conspiracy until the Bloomberg article was published on June 1, 2018.

136. Because of Defendants' concealment, any applicable statute of limitations affecting or limiting the rights of action by Plaintiffs or members of the Class have been tolled during the period of concealment.

CLASS ACTION ALLEGATIONS

137. Plaintiffs, on behalf of itself and those similarly situated, seeks damages against Defendants based on the allegations contained herein.

138. Plaintiffs brings this action on behalf of themselves and as a class action under Federal Rule of Civil Procedure 23(a) and (b)(3), on behalf of a similarly situated Class defined as follows:

> All persons or entities who, from January 1, 2012 to June 1, 2018, directly transacted in unsecured Fannie Mae, Freddie Mac, FFCB, or FHLB bonds with Defendants, or their respective subsidiaries or affiliates, in the United States or its territories or otherwise involving U.S. trade or commerce. Excluded from the Class are Defendants, their co-conspirators identified herein, and their officers, directors, management, employees, current subsidiaries or affiliates, and all federal governmental entities.

139. **Numerosity**. Members of the Class are so numerous that joinder is impracticable. Plaintiffs does not know the exact size of the Class, but believes that there are thousands of Class members geographically dispersed throughout the United States.

140. **Typicality.** Plaintiffs' claims are typical of the claims of Class members. Plaintiffs and all Class members were damaged by the same wrongful conduct of Defendants. Specifically, Defendants' wrongdoing caused Plaintiffs and Class members to pay inflated bond prices when they were buying or receive unduly low bond prices when they were selling. Indeed, Plaintiffs' claims arise out of the same common course of conduct giving rise to the claims of the other Class members.

141. Plaintiffs will fairly and adequately protect and represent the interests of the Class. The interests of Plaintiffs are coincident with, and not antagonistic to, those of the Class. Accordingly, by proving its own claims, Plaintiffs will prove other Class members' claims as well.

142. **Adequacy of Representation.** Plaintiffs are represented by competent counsel who are experienced in the prosecution of antitrust and class action litigation, as well as litigation concerning the manipulation of financial markets and products. Plaintiffs and their counsel have

the necessary financial resources to adequately and vigorously litigate this class action. Plaintiffs can and will fairly and adequately represent the interests of the Class and have no interests that are adverse to, conflict with, or are antagonistic to the interests of the Class.

143. **Commonality.** There are questions of law and fact common to the Class, including, but not limited to:

a) whether Defendants and their co-conspirators engaged in an agreement, combination, or conspiracy to fix, raise, elevate, maintain, or stabilize GSE bond bid-offer spreads in interstate commerce in the United States;

b) the identity of the conspiracy's participants;

c) the duration of the conspiracy alleged herein and the acts carried out by Defendants and their co-conspirators in furtherance of the conspiracy;

d) whether the alleged conspiracy violated Section 1 of the Sherman Act;

e) whether the conduct of Defendants and their co-conspirators, as alleged herein, caused injury to the business and property of Plaintiffs and other Class members;

f) whether Defendants fraudulently concealed their conspiracy from Plaintiffs and other Class members;

g) the appropriate measure of damages sustained by Plaintiffs and other Class members;

h) whether Plaintiffs and other Class members are entitled to injunctive relief and, if they are, the appropriate injunctive relief in this matter.

144. **Predominance.** These and other questions of law and fact common to the members of the Class predominate over questions that may affect only individual Class

members. Defendants have acted on grounds generally applicable to the entire Class, making a common methodology for determining class damages as a whole appropriate.

145. **Superiority**. Class action treatment is superior to other available methods for the fair and efficient adjudication of the controversy. The Class is readily definable. Prosecution as a class will permit a large number of similarly situated, geographically dispersed persons and entities to prosecute their common claims in a single forum simultaneously, efficiently, and without the unnecessary duplication of evidence, effort, or expense that numerous individual actions would engender. This action presents no difficulties in management that would preclude maintenance as a class action. As a result, the benefits of proceeding through the class mechanism, including providing injured persons or entities a method for obtaining redress on claims that could not practicably be pursued individually, substantially outweighs any potential difficulties in management of this class action. Additionally, the Class has a high degree of cohesion, and prosecution of the action through representatives would be unobjectionable.

CAUSES OF ACTION

SHERMAN ACT
VIOLATION OF 15 U.S.C. § 1

146. Plaintiffs incorporate each preceding and succeeding paragraph as though fully set forth herein.

147. Beginning at least as early as January 1, 2012, Defendants, and their co-conspirators, entered into and engaged in a continuing agreement, understanding, or conspiracy in restraint of trade in violation of Section 1 of the Sherman Act, 15 U.S.C. § 1. This continuing agreement, understanding, or conspiracy between and among Defendants and their co-conspirators was in furtherance of fixing, maintaining, or making artificial prices on unsecured GSE bonds.

148. Defendants' unlawful conduct was through mutual understandings, combinations, or agreements by, between, and among Defendants and other unnamed co-conspirators.

149. Defendants' conspiracy is a *per se* violation of the Sherman Act and is, in any event, an unreasonable and unlawful restraint of trade.

150. There is no legitimate business justification for, or procompetitive benefits caused by, Defendants' unreasonable restraint of trade. Any ostensible procompetitive benefit was pretextual or could have been achieved by less restrictive means.

151. Defendants' conspiracy, and the resulting impact on the prices of GSE bonds occurred in and affected interstate commerce and commerce in and between the Territories of the United States.

152. As a direct, intended, foreseeable, and proximate result of Defendants' conspiracy and overt acts taken in furtherance thereof, Plaintiffs and each member of the Class suffered injury to their business or property. Plaintiffs and each Class member's damages are directly attributable to Defendants' conduct, which resulted in all Class members paying artificially inflated bid-offer spreads on every unsecured GSE bond they purchased or sold during the Class Period.

153. Plaintiffs' and the Class's injuries are of the type the antitrust laws were designed to prevent, and flow from that which makes Defendants' conduct unlawful.

154. Plaintiffs and the Class seek treble damages, attorneys' fees, reasonable expenses, and cost of suit for the violations of the Sherman Act.

JURY DEMAND

Pursuant to Federal Rule of Civil Procedure 38, Plaintiffs, on behalf of themselves and the proposed Class, demand a jury trial on all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs, on behalf of themselves and the proposed Class, respectfully request that the Court:

a) Determine that this action may be maintained as a class action under Federal Rule of Civil Procedure 23(a) and (b)(3), direct that reasonable notice of this action, as provided by Federal Rule of Civil Procedure 23(c)(2), be given to the Class, designate Plaintiffs as Class representative, and appoint Plaintiffs' counsel as counsel for the Class;

b) Adjudge and decree that Defendants' unlawful conduct alleged herein violates Section 1 of the Sherman Act;

c) Find Defendants jointly and severally liable for the damages incurred by Plaintiffs and the Class;

d) Award Plaintiffs and the Class treble damages against Defendants for their violations of federal antitrust laws, plus interest;

e) Award Plaintiffs and the Class their costs of suit, including reasonable attorneys' fees and expenses, as provided by law;

f) Award Plaintiffs and the Class all available pre-judgment and post-judgment interest, to the fullest extent available under law or equity, from the date of service of the initial Complaint in this action; and

g) Permanently enjoin and restrain Defendants from continuing and maintaining the conspiracy alleged in the Complaint;

h) Order such other, further, and general relief as it may deem just and proper.

Dated: March 26, 2019

Respectfully submitted,

/s/ Michael B. Eisenkraft

Michael B. Eisenkraft
Sharon K. Robertson
Cohen Milstein Sellers & Toll PLLC
88 Pine Street, 14th Floor
New York, NY 10005
Telephone: (212) 838-7797
meisenkraft@cohenmilstein.com
srobertson@cohenmilstein.com

Carol V. Gilden
Cohen Milstein Sellers & Toll PLLC
190 South LaSalle Street
Suite 1705
Chicago, IL 60603
Telephone: (312) 357-0370
cgilden@cohenmilstein.com

Christina D. Saler
Cohen Milstein Sellers & Toll PLLC
3 Logan Square, 1717 Arch Street
Suite 3610
Philadelphia, PA 19103
Telephone: (267) 479-5700
csaler@cohenmilstein.com

Brent W. Johnson
Robert A. Braun
Cohen Milstein Sellers & Toll PLLC
1100 New York Ave. NW, Fifth Floor
Washington, DC 20005
Telephone: (202) 408-4600
bjohnson@cohenmilstein.com
rbraun@cohenmilstein.com

Attorneys for Plaintiffs Dallas Area Rapid Transit Employees Retirement Benefit Plan and Trust and Sheet Metal Workers' Local 19 Pension Fund and the Proposed Class